Chapter Six
FINANCIAL MANAGEMENT AND DEVELOPMENT PROGRAM

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The analyses conducted in previous chapters have evaluated airport development needs based upon forecast aviation activity, environmental factors, and operational efficiency. One of the most important elements of the master planning process, however, is the application of basic economic, financial, and management rational so that the feasibility of implementation can be assured. This chapter will concentrate on those factors that will help make the plan successful. A logical development schedule is essential to maintain a realistic and cost effective program for Cottonwood Municipal Airport.

The program outlined on the following pages has been evaluated from a number of perspectives. The plan is not dependent exclusively upon the City of Cottonwood for funding new facilities. In fact, with proper and timely decision-making on the part of officials, it is quite possible for the City of Cottonwood to acquire nearly $4.6 millon in improvements over the next twenty years for less than 7 cents on the dollar.

FEDERAL AIRPORT IMPROVEMENT PROGRAM

Airport development and funding in Arizona is accomplished through a cooperative effort involving three levels of government: local, state and federal. A major funding mechanism that is anticipated to exist throughout the 20-year program, is the federal Airport Improvement Program (AIP), although the present authorized bill passed in 1992 will expire in 1993. This program funded by airport users through user taxes and fees, is authorized to provide $1.8 billion per year

to airports through 1993. Congress is currently formulating a new program for funding airport improvements.

AIP monies are distributed to airports in the form of entitlements (based on levels of passenger enplanements) and discretionary grants. The City of Cottonwood is currently eligible only for discretionary grants since there is no commercial service at the airport. The AIP can provide up to 91.06 percent of the funds for airport projects in Arizona that meet the eligibility requirements established by the FAA.

Grants obtained by the airport from the FAA must always be matched by local funds. It is important for the sponsor to act expeditiously in securing the federal share of these grants.

ARIZONA AVIATION FUND

Another source of funds available for airports in the State of Arizona is the Arizona Aviation Fund. Taxes levied by the State on aviation fuel, flight property, aircraft registration lieu tax and registration fees, as well as interest on these funds are deposited in the Arizona Aviation Fund. These funds have the dual objective of maximizing the effective use of fund dollars for Arizona airport improvements, while attracting maximum federal AIP funds. The Transportation Policy Board establishes the policies for distribution of these State dollars. Projects are considered within the priorities established for each of four airport categories: Commercial Service and Reliever Airports, airports in the Primary system, airports in the Secondary system and special projects. Currently, local sponsors can obtain one half (4.47 percent) of the local share from the aviation fund for eligible federal AIP projects or 90 percent on state-local projects.

CAPITAL IMPROVEMENT PROGRAM

Once the specific needs of the airport have been established, the next step is to determine realistic costs for each development item. In addition, day to day operating expenses will also be an important factor in determining the amount of funds available for the local share. Development and operating costs are compared to the potential funds available. A schedule is then developed in an attempt to balance the need for each facility and its cost with the projected income sources that can be identified.

This section examines the total cost of each development project and a schedule for the projects. The following sections will examine the revenue sources and expenses of the airport operation. From this evaluation, any shortcomings can be determined and adjustments made to establish a financial program for the airport.

AIRPORT DEVELOPMENT SCHEDULE

In order to better assess the effect of the airport development costs on the overall financial system, the timing or schedule of each development item should be estimated. This evaluation can initially be conducted be dividing the development needs into three stages covering the first five, the second five and the final ten year periods, respectively. The first stage includes those items of highest priority to meet safety and short-term activity needs. The second five-year stage includes those items necessary to tie together related development items and maintain or

improve the capacity of the facility. The third long-term phase, covering the remaining years of the planning period, includes those additional items necessary to improve efficiency and the overall operational effectiveness of facilities on the airport. Of course, each phase should include basic maintenance and revenue generating components.

Prior to summarizing the staged capital costs, two important points should be emphasized. First, the staging of development projects is based upon projected airport activity levels and should be considered in conjunction with Capital Improvement Projects already being contemplated and funded by the City of Cottonwood. In the case of Cottonwood Municipal Airport, all of these previously approved projects are identified in the Stage I development program. Secondly, all of the projects will be determined by the level of airport activity. Actual activity levels may vary from the projected activity level. Implementation of capital improvement projects should only occur after the cost has been achieved. The airport development program is based on a fiscal year development to coincide with the City's financial period.

Stage I, the first five year period of the development program, has been subdivided into individual fiscal years, FY 1993 through FY 1997. Stage I, as illustrated in **Table 6A**, includes previously approved and funded projects. Stage I includes the following airside improvements; pavement preservation, installation of REIL's on Runway 14, and the repair of the REIL's on Runway 32. Landside development included in Stage I includes the construction of a 1,600 square foot terminal building with associated automobile parking, construction of 10 T-hangars and 10 new T-shades, and the relocation of the 12 existing T-shades and the construction of an aircraft washrack, the extension of the existing apron area, the installation of an airport security fence, installation of an above-ground fuel storage facility, and the installation of an airport access road. Also included in Stage I is the acquisition of land for approach protection and landside expansion. Total development cost for Stage I is approximately $2.2 million (expressed in 1993 dollars).

Projects identified in the **Stage II** development program encompass the five year period from FY 1998 through FY 2002. The major projects associated with Stage II development include the addition of 1,000 square feet to the terminal building, installation of an NDB, pavement preservation, extension of the apron area, and the construction of ten additional T-shades or T-hangars. Total cost associated with the Stage II development is approximately $0.7 million (1993 dollars).

Stage III contains projects for the longer range needs of the airport that will be accomplished during the period FY 2003 to FY 2012. Projects programmed for this stage includes the relocation of the parallel taxiway, installation of MITL, construction of a conventional hangar, construction of additional T-hangars and T-shades, extension of the apron area, and pavement preservation. The total estimated cost for Stage III development is approximately $1.6 million (1993 dollars).

TABLE 6A
Capital Improvement Program
Cottonwood Municipal Airport

		TOTAL	FAA	STATE	LOCAL	PRIVATE
STAGE I (FY1993-1997)						
FY1993-1994						
1.	Construct terminal building	$175,000	$0	$157,500	$17,500	$0
2.	Install 10 T-hangars and aircraft washrack	210,000	0	0	0	210,000
	FY1993-1994 Subtotal	$385,000	$0	$157,500	$17,500	$210,000
FY1994-1995						
1.	Land Acquisition - Approach Protection, ± 6.3 acres	$280,000	$254,968	$12,516	$12,516	$0
2.	Relocate 12 T-shades	20,000	18,212	894	894	0
3.	Expand apron area, ± 14,000 SF	175,000	159,355	7,823	7,822	0
4.	Install security fence	$40,000	$36,424	$1,788	$1,788	$0
	FY1994-1995 Subtotal	$515,000	$468,959	$23,021	$23,020	$0
FY1995-1996						
1.	Construct 10 T-shades	$140,000	$0	$0	$0	$140,000
2.	Install REIL's Runway 14	16,000	14,570	715	715	0
	FY1995-1996 Subtotal	$156,000	$14,570	$715	$715	$140,000
FY1996-1997						
1.	Install Above-ground fuel storage facility, 10,000 gallon	$60,000	$0	$0	$60,000	$0
2.	Remove existing fuel storage facility	$10,000	$0	$0	$10,000	$0
	FY1996-1997 Subtotal	$70,000	$0	$0	$70,000	$0
FY1997-1998						
1.	Land Acquisition, ± 15 acres	$675,000	$614,655	$30,172	$30,173	$0
2.	Install Airport access road	40,000	36,424	1,788	1,788	0
3.	Construct automobile parking facility	38,000	0	34,200	3,800	0
	FY1997-1998 Subtotal	$753,000	$651,079	$66,160	$35,761	$0
STAGE I TOTAL (FY1993-1997)		$1,879,000	$1,134,608	$247,395	$146,997	$350,000

TABLE 6A (Continued)
Capital Improvement Program
Cottonwood Municipal Airport

	TOTAL	FAA	STATE	LOCAL	PRIVATE
STAGE II (FY1998-2002)					
1. Acquire Avigation Easements, ±1.2 acres	$55,000	$50,083	$2,458	$2,459	$0
1. Relocate Segmented Circle	6,000	5,464	268	268	0
2. Terminal building expansion, 1,000 SF	110,000	0	99,000	11,000	0
3. Install NDB	60,000	60,000	0	0	0
4. Paint Non-Precision markings	14,000	12,748	626	626	0
5. Construct 10 T-shades	140,000	0	0	0	140,000
6. Expand Apron area, ± 23,000 SY	290,000	264,074	12,963	12,963	0
7. Pavement preservation	100,000	0	90,000	10,000	0
STAGE II TOTAL	$775,000	$392,369	$205,315	$37,316	$140,000
STAGE III (FY2003-2015)					
1. Relocate Taxiway A	$725,000	$660,185	$32,407	$32,408	$0
2. Install MITL	186,000	169,372	8,314	8,314	0
3. Construct Conventional Hangar	85,000	0	0	0	85,000
4. Construct 10 T-hangars	200,000	0	0	0	200,000
5. Expand Apron area, ± 25,000 SY	300,000	273,180	13,410	13,410	0
6. Pavement preservation	100,000	0	90,000	10,000	0
STAGE III TOTAL	$1,596,000	$1,102,737	$144,131	$64,132	$285,000
TOTAL PROGRAM COSTS (FY1993-2015)	$4,250,000	$2,629,714	$596,841	$248,445	$775,000

AIRPORT DEVELOPMENT COST SUMMARY

The listing of projects under each stage in the development program as outlined in **Table 6A**, represents the basic budget factors, needs or demands, and priority assignments for the associated airport development through the planning period.

Cost estimates were developed from information provided by construction industry sources as well as a review of actual costs on similar airport projects. This information was applied to pavement, earthwork, and building volume requirements for the Cottonwood Municipal Airport to determine estimated construction costs. A 25 percent contingency for engineering, legal fees, and unforseen costs are included in estimated cost. Private

entirely by the federal agency) are listed and included in the total funding for each Stage.

In future years, the cost shown in **Table 6A** will need to be adjusted for subsequent inflation. This may be accomplished by converting the interim change in the United States Consumer Price Index (USCPI) into a multiplier ratio through the following formula:

$$\frac{X}{Y} - Z \text{ (Change Ratio)}$$

X = USCPI in any given year
Y = USCPI in 1993

Multiplying the change ratio (Z) by any 1993-based cost estimate presented in this study will yield the adjusted dollar amounts appropriate in any future year. The local or state CPI may be used since the national CPI may not be representative of this community.

AIRPORT OPERATING REVENUE AND EXPENDITURES

The City of Cottonwood has established an Airport Account within the City's General Fund budget system. The historical revenues and expenses associated with the operation of Cottonwood Municipal Airport are presented in **Table 6B.**

TABLE 6B
Historic Revenues and Expenses - FY1987-FY1992
Cottonwood Municipal Airport

	Fiscal Years				
	87-88	88-89	89-90	90-91	91-92
REVENUES					
Land Leases	$9,807	$11,376	$11,450	$14,337	$14,337
TOTAL REVENUES	**$9,807**	**$11,376**	**$11,450**	**$14,337**	**$14,337**
EXPENSES					
Equipment Maint. and Repair	$1,545	$2,335	$814	$1,162	$1,500
Misc. Expenses	$242	$14	$200	$570	$400
Airport Improvements	$0	$0	$1,419	$978	$700
Grant Matching Funds	$15,828	$0	$6,609	$0	$10,035
TOTAL EXPENSES	**$17,615**	**$2,349**	**$9,042**	**$2,710**	**$12,635**

SOURCE: City of Cottonwood

The City of Cottonwood currently does not account for revenue at the airport in a separate Airport Revenue classification. The City does, however, classify expenditures into three areas: Equipment Maintenance and Repair, Miscellaneous Expenses, and Airport Improvements. The establishment of more specific accounting classifications can assist in the financial analysis of trends and projections during the planning period. The following categories for revenues and expenses would provide the City with better insight into the airport's cash flow in the future. These categories should be setup in an Airport Enterprise Fund within the City's budget system. These accounts are explained in greater detail in the paragraphs that follow.

AIRPORT OPERATING REVENUES

Presently, the City of Cottonwood's revenue related to the airport is derived from one basic source: land lease. Although FAA and ADOT grants are treated as revenue in the City's financial reports, for purposes of this analysis, grant income is not included as a revenue account. A brief description of each revenue category is outlined in the following paragraphs.

Fuel Sales

Fuel sales at general aviation airports are generally the primary source of revenue. It is expected that fuel sales at Cottonwood Municipal Airport will be a relatively small revenue generator. Future revenues related to fuel sales should be programmed to provide a 25 percent profit per gallon.

Lease Income

This category consists of revenue obtained from land lease on the airport. This could include Fixed Based Operators, hangar parcels, or business/industrial parcels. The lease revenues at Cottonwood Municipal Airport are expected to increase throughout the planning period, as the amount of developable land is utilized. This category can be expected to comprise a major portion of the revenues generated at the airport.

Miscellaneous Income

Miscellaneous income represents revenue received from temporary or minor sources such as gate access cards, special events, use of special equipment, etc. This revenue category would generally be a relatively small portion of the total airport revenue.

Non-Operating Revenue

The airport could potentially have two categories of Non-operating Revenue: Interest Revenue and transfers from the City's General Fund. Revenue from these two categories should be expected to be a minor portion of the airport revenue; however, transfers from the General Fund could be a significant factor if the airport enterprise fund cannot support the airport expenses.

AIRPORT OPERATING EXPENSES

Although the City accounts for expenses in the three categories previously indicated,

the following six expense accounts would provide the City with the ability to analyze the airport's cash flow in more detail.

- Personnel
- Administrative
- Supplies
- Maintenance
- Utilities
- Equipment

Personnel Expenses

Personnel expenses include salaries, benefits, employee travel or education, and other closely related expenses. At the present time the City does not account for any expenses in this category. However, if the City were to manage the airport facilities, this category would provide a means of breaking out those related expenses. Personnel expenses can be expected to comprise nearly 60 to 65 percent of the total airport expenses.

Administrative Expenses

Administrative expenses include professional services, travel, membership, dues and audit fees. Administrative expenses at the airport have not historically been separated; however, administrative expenses could account for approximately 20 to 25 percent of the future airport expenses.

Supply Expenses

The Supply category includes office supplies, terminal supplies, and maintenance supplies. These expenses related to supplies can be expected to be a small part (1 to 2 percent) of the total airport expenses.

Maintenance Expenses

Maintenance expenses include maintenance of the terminal and airfield facilities, as well as electronic/communications equipment. This category can be expected to consist of approximately 5 to 6 percent of the total airport expenses.

Utility Expenses

The Utility expense category includes the cost of electricity, water, sewer, and telephone at the airport. At the current time, the City does not account for utility expenses related to the operation of the airport. In order to determine if the airport is operating in a positive cash flow, the utility expenses will need to be identified. The utility expenses, specifically electricity, can be a sizable expense. It can be expected that nearly 12 percent of the total airport expenses could be attributed to Utility Expenses.

Equipment Expenses

Capital equipment items procured for airport purposes would be charged to this account. As the airport activity grows, the amount of equipment necessary to maintain the airport can be expected to increase. Approximately 2 to 3 percent of airport expenses can be related to equipment purchases.

AIRPORT DEVELOPMENT AND FUNDING SOURCES

As previously mentioned, financing for the development and operation of an airport does not typically come from only one source. Such is the case with Cottonwood Municipal Airport, where federal, state and private funding will be necessary during the next 20 years. The primary contributor to development and operation of the airport will be the aviation community.

FEDERAL AND STATE AID TO AIRPORTS

As discussed earlier in the chapter, the federal AIP provides funds through *discretionary funding*.

Airport discretionary Funds

For airports that do not qualify for entitlement funding, discretionary funding is available. The primary feature of AIP funding that must be recognized is that discretionary funds are distributed on a priority basis. These priorities are established by each FAA regional office based upon the number and dollar amount of applications received. Since the program provides over 91 percent of the funding for those eligible projects selected, it is essential to most public airport development programs. Cottonwood Municipal Airport, therefore, will be competing for discretionary fund development grants with other communities in Arizona and the FAA-Western Pacific Region (California, Nevada, and Hawaii) as well as the remainder of the country. Consequently, the development program for Cottonwood Municipal Airport must be closely coordinated with the FAA, both now and in the future.

Table 6A depicts the item-by-item breakdown of federal, state, local and private funding for the proposed development program. The majority of improvements will be eligible; however, improvements such as automobile parking, fuel storage facilities and hangars are not eligible for AIP funding.

The Arizona Aviation Trust Fund

As indicated earlier in the chapter, assistance in obtaining the local share for development projects can also come from the Arizona Aviation Trust Fund. Federally eligible projects can normally receive half of the local share (4.47 percent) from the Arizona Aviation Trust Fund while approved state-local development projects might receive up to 90 percent funding from the State. Cottonwood Municipal Airport must compete with other Arizona airports for state funding. The development program must be coordinated with the State in order to assure equitable distribution of funds for airport programs.

OTHER FUNDING SOURCES

The City of Cottonwood will need to consider other sources of funding for obtaining the local share of its capital improvement projects. In addition to the revenues derived from airport operations, several other methods are available for financing the local share of airport development costs. The more common methods involve debt financing which amortize the debt over the useful life of the project or a specified period. Methods of financing available to the City are discussed below.

General Obligation Bonds

General Obligation (GO) bonds are a common form of municipal bonds whose payment is secured by the full faith, credit, and taxing authority of the issuing agency. GO bonds are instruments of credit and, because of the community guarantee, reduce the available debt level of the sponsoring community. This type of bond uses tax revenues to retire debt. If approved, GO bonds are typically issued at a lower interest rate than other types of bonds.

Self Liquidating General Obligation Bonds

As will all GO bonds, *Self Liquidating* Bonds are secured by the issuing government agency. They are retired, however, adequate cash flow from the operations of the facility. If the state court determines that the project is self-sustaining, the debt may be legally excluded from the community's debt limit. Since the credit of the local government bears the ultimate risk of default, for the purpose of financial analysis, the bond issue is still considered as part of the debt burden of the community. Therefore, this method of financing may mean a higher rate of interest on all bonds sold by the community. The amount of increase in the interest rate depends, in part, upon the degree of exposure risk of the bond. Exposure risk occurs when there is insufficient net airport operating income to cover the level of debt service plus coverage requirements, thus forcing the community to absorb the residual.

Revenue Bonds

Revenue Bonds are retired solely from the revenue of a particular project or from the operating income of the issuing agency, such as the City of Cottonwood. Generally, they fall outside statutory limitations on public indebtedness and, in many cases, do not require voter approval. Because of the limitations on other public bonds, airport sponsors are increasingly turning to revenue bonds whenever possible.

However, Revenue Bonds normally carry a higher rate of interest because they lack the security of tax supported GO bonds issued by other government bodies. It should also be noted that the general public would usually be aware of the risk involved with a revenue bond issue for a general aviation airport. Thus, the sale of Revenue Bonds in this case could be more difficult than those for established air carrier airports.

Revenue Bonds are more suited to larger general aviation airports that have sufficient cash flow and income to retire the debt in a reasonable time period. Although Revenue Bonds are a possibility, it is doubtful that this method would be a feasible option for financing the development of Cottonwood Municipal Airport.

Combined Revenue/General Obligation Bonds

These bonds, also known as *Double-Barrel* Bonds, are secured by a pledge of back-up tax revenues to cover principal and interest payments in cases where airport revenues are insufficient. The combined Revenue/Obligation bond interest rates are usually lower then Revenue Bond rates due to their back-up tax provisions.

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Bank Financing

Some airport sponsors have successfully used bank financing as a means of

providing airport development capital. Generally, two conditions are required: the airport must demonstrate the ability to repay the loan at current market rates, and the capital improvement must be less than the value of the present facility. These are standard conditions which are applied to almost all bank loan transactions. This method of financing is particularly useful for smaller development items that will produce revenues and a positive cash flow, and for cases when no private financing is available.

State Airport Loan Program

A recent program started at the Arizona Department of Transportation - Aeronautics Division (ADOT) is the Airport Loan Program. This program was established to enhance the utilization of the State funds. The program is designed to be a flexible funding mechanism to assist eligible airport projects.

Eligible airport related projects include runway, taxiway, aircraft parking aprons, hangars, fuel storage facilities, terminal buildings, utility services, land acquisition, planning studies, and preparation of plans and specifications for airport construction projects. Some projects, which are not currently eligible for state funding, would be considered under the load program if the project would enhance the airport's ability to be self-sufficient.

There are three ways in which the loan funds can be used: Grant Advance, Matching Funds, or Revenue Generating Projects. The Grant Advance funds are provided when the airport can demonstrate the ability to accelerate the development and construction of a multi phase project. The project(s) must be compatible with the Airport Master Plan and included in the ADOT 5-year Airport Development Program. The Matching Funds are provided to meet the local matching fund requirement for securing federal airport improvement grants or other federal or state grants. The Revenue Generating funds are provided for airport related construction projects which are not eligible for funding under another program. Although the Loan Program is an option for receiving funding, the availability of funds through this program are subject to the State's aviation revenue generated.

THIRD-PARTY SUPPORT

Several types of funding would be classified as third-party support. For example, individuals or interested organizations may contribute portions of the required development funds. Private donations are not a common means of airport financing; however, the private financial contributions not only increase the financial support of the project, but also stimulate moral support to airport development.

A slightly more common method of third party support involves permitting the Fixed Based Operator (FBO) to construct their own hangar and maintenance facilities on property leased from the airport. The advantage to the airport in this type of an arrangement is that it lowers the local share of development costs, a large portion of which is building construction. The advantage to the FBO is that the development may qualify for investment tax credit and that they would be allowed depreciation on the facilities. However, the disadvantage with this option is that the City will receive a smaller percentage of the revenue generated at the airport. For this reason, it is important to consider all eventualities before entering into a specific lease agreement.

CONTINUOUS PLANNING

The successful implementation of the Cottonwood Municipal Airport Master Plan will require sound judgement by airport management. Among the more important factors influencing management decisions to implement a recommendation are timing and airport activity. Both of these factors can be used as references in plan implementation. While it was necessary for scheduling and budgeting purposes to focus on the timing of airport development, the actual need for facilities is in fact established by levels of activity. Proper master plan implementation suggests the consideration of the airport activity rather than time as a guide toward scheduling future airport development.

Experience has indicated that major problems materialize from a rigid format for master plans. These problems involve the plan's inflexibility and inherent inability to deal with new issues that develop from unforeseen changes that may occur during the planning period. The format used in the development of the Master Plan has attempted to deal with this issue. This section is titled Continuous Planning for several reasons. The first reason is to emphasize that planning is a continuous process that does not end with the completion of a major project. The second is to recognize this fact without invalidating the overall Master Plan. The primary issues upon which this Master Plan is based are expected to remain valid for a number of years.

The real value of a usable master plan is that it keeps the issues and objectives in the mind of the user. Consequently, the manager is better able to recognize change and its effect. The continuous planning process can make the preparation of a master plan much more cost effective by extending the period of time for which the plan is valid, and can eliminate the need for costly updates.

Guidelines and worksheets are included in the following section for each future year during the initial five-year stage of development from FY1993 to FY1997. Summary worksheets are also included for Stage II (FY1998-FY2002) and Stage III (FY2003-FY2015). All estimated development costs are based on 1991 dollars. Therefore, costs must be adjusted by the appropriate inflation rate factor in effect at the time of development.

CONTINUOUS PLANNING AIDS

The continuous planning process allows airport management to consistently monitor the progress of the airport in terms of growth in based aircraft and annual operations, because this growth is critical to the specific timing and need for new airport facilities. The information obtained from this monitoring process will provide the data necessary to determine if the development schedule should be accelerated, decelerated, or maintained as scheduled.

On an annual basis, airport management should compile this information and determine the actual number of enplanements, total amounts of fuel sales, and total annual aircraft operations. Use of the Continuous Planning Chart, **Exhibit 6A**, and the Continuous Planning Graph, **Exhibit 6B**, will enable management to visualize airport activity growth and compare it to the forecast levels. These exhibits are located at the end of this chapter.

In addition, since fuel sales are an important revenue source for the airport, actual fuel sales in gallons should be recorded on a yearly basis and compared to forecast levels. Fuel sales per operation should also be determined and compared with forecast levels. This continuous planning process data should be entered into the space provided on the yearly airport development schedule.

With this information, adjustments in the development schedule can be made to effectively deal with variations in forecast or any unanticipated demand that may arise. By closely monitoring the activity and availability of funds with the worksheets provided on the following pages, management will be able to effectively implement the Cottonwood Municipal Airport Master Plan.

SUMMARY AND CONCLUSIONS

As previously indicated, federal funding will be the primary funding source for development of Cottonwood Municipal Airport and will be instrumental in the implementation of the plan. Arizona Aviation Trust Fund revenue, airport revenue, and private funding will also contribute to financing airport development. The airport will need to keep abreast of all potential funding sources, and will need to research each source on a continuing basis. By closely monitoring the activity and availability of funds with the worksheets provided at the end of this chapter, management will be implementing the Master Plan.

91MP21-6A-7/21/93

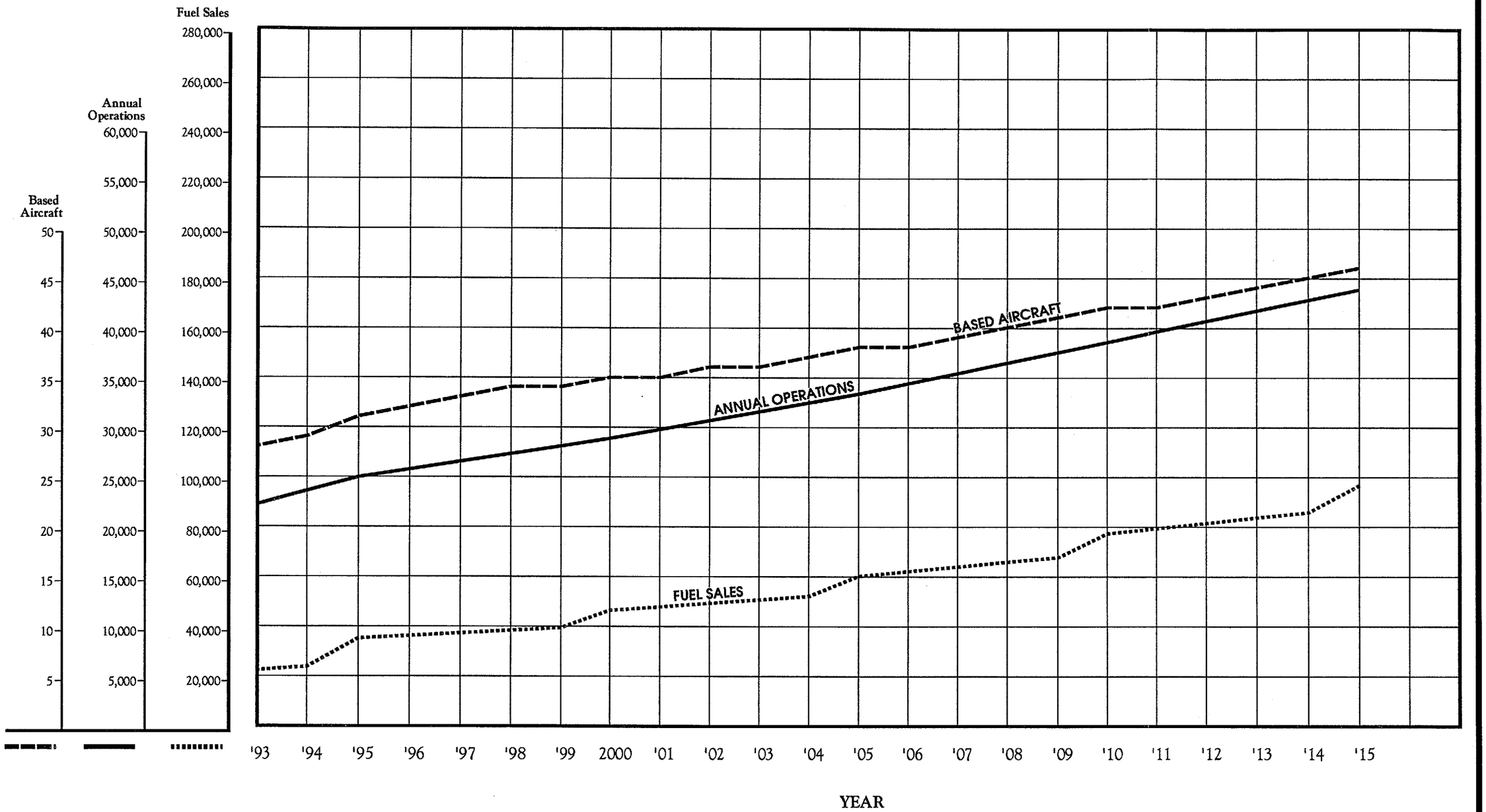
COTTONWOOD MUNICIPAL AIRPORT

	Based Aircraft		Annual Operations		Fuel Sales	
Year	Forecast	Actual	Forecast	Actual	Forecast	Actual
1993	28		22,160		22,160	
1994	29	30	23,535		23,535	
1995	31		24,910		34,874	
1996	32	29	25,690		35,966	
1997	33		26,470		37,058	
1998	34		27,250		38,150	
1999	34		28,030		39,242	
2000	35		28,810		46,096	
2001	35		29,710		47,536	
2002	36		30,610		48,976	
2003	36		31,510		50,416	
2004	37		32,410		51,856	
2005	38		33,310		59,958	
2006	38		34,350		61,830	
2007	39		35,390		63,702	
2008	40		36,430		65,574	
2009	41		37,470		67,446	
2010	42		38,510		77,020	
2011	42		39,570		79,140	
2012	43		40,630		81,260	
2013	44		41,690		83,380	
2014	45		42,750		85,500	
2015	46		43,810		96,382	

Cottonwood ARIZONA

Exhibit 6A
CONTINUOUS PLANNING CHART

91MP21-6B-7/23/93



Cottonwood ARIZONA
Heart of the Verde Valley

Exhibit 6B
CONTINUOUS PLANNING GRAPH

STAGE I
FY1993-1997 Airport Development Program

The table provided below has been designed to note the funds available so that they can be kept in mind while analyzing the development factors outlined for this period on the next few pages. The table also provides a reminder of other potential sources that might be used in critical situations.

Airport Funds Balance $_____
Bonds $_____
Contributions/Other $_____

TOTAL: $_____

As a reminder, airport development should be keyed to demand (**actual** activity) rather than to a specific time frame (**forecast** activity). The spaces provided below allow actual activity data to be recorded for comparison with the forecast levels. This should be the first step in the process of initiating the recommended development program for this period. Significant difference between forecast and actual activity may justify acceleration or deceleration of the airport development schedule.

Item	FY1993-1994		FY1994-1995		FY1995-1996		FY1996-1997		FY1997-1998	
	FCST	ACT	FCST	ACT	FCST	ACT	FCST	ACT	FCST	ACT
Based Aircraft	30		31		32		33		33	
Operations	23,535		24,910		25,690		26,470		27,250	
Fuel Sales (Gallons)	23,535		34,874		35,966		37,058		38,150	
Enplanements	2,100		4,200		4,340		4,480		4,620	

Based on the activity comparison above, should the recommended development schedule be maintained? Have new problems, needs or development potentials occurred which may impact the development program? What adjustments in the development schedule are required to effectively deal with these factors?

In order to maintain the continuity of a staged development plan and to meet forecast activity demand, the following development items are recommended. Each item is numbered so that it can be cross-referenced on the following exhibit. The costs for every development consider 25 percent of engineering, contingency, and administration.

What items? Items in the Table on p. 6-15?

STAGE I (Continued)
FY1993-1997 Development Funding

Development Item	Local	Federal	State	Private	Total
Stage I - FY1993-1994					
1. Construct terminal building	$17,500	$0	$157,500	$0	$175,000
2. Install T-hangars and aircraft washrack	0	0	0	210,000	210,000
TOTAL STAGE I FY1993-1994	$17,500	$0	$157,500	$210,000	$385,000
Stage I - FY1994-1995					
3. Land Acquisition (± 6.3 acres)	$12,516	$254,968	$12,516	$0	$280,000
4. Relocate (12) T-shades	894	18,212	894	0	20,000
5. Extend apron area	7,822	159,355	7,823	0	175,000
6. Install security fence	1,788	36,424	1,788	0	40,000
TOTAL STAGE I FY1994-1995	$23,020	$468,959	$23,021	$0	$515,000
Stage I - FY1995-1996					
7. Construct (10) T-shades	$0	$0	$0	$140,000	$140,000
8. Install REIL's Runway 14	715	14,570	715	0	16,000
TOTAL STAGE I FY1995-1996	$715	$14,570	$715	$140,000	$156,000
Stage I FY1996-1997					
9. Install above ground fuel storage facility	$60,000	$0	$0	$0	$60,000
10. Remove existing fuel storage facility	10,000	0	0	0	$10,000
TOTAL STAGE I FY1996-1997					
Stage I - FY1997-1998					
11. Land Acquisition (± 15 acres)	$30,173	$614,655	$30,173	$0	$675,000
12. Install Airport access road	1,788	36,424	1,788	0	40,000
13. Construct automobile parking facility	3,800	0	34,200	0	38,000
TOTAL STAGE I - FY1997-1998	$66,160	$651,079	$35,761	$0	$753,000
TOTAL STAGE I FY1993-1997	**$146,997**	**$1,134,608**	**$247,395**	**$350,000**	**$1,879,000**

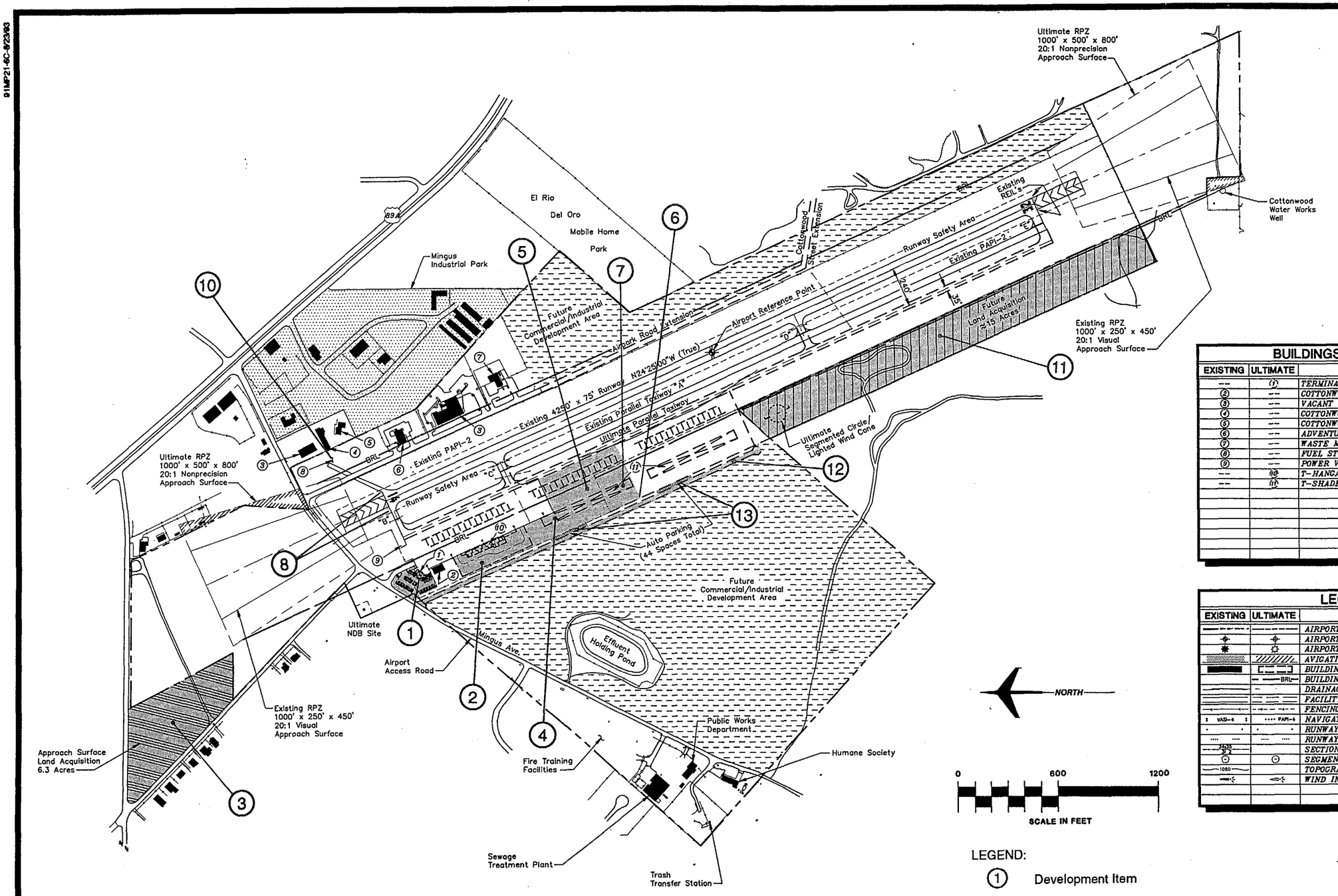
Inflation Adjustment: _____% X $1,879,000 = $_____

Plus or Minus Other Proposed Development:

1.			
2.			
3.			
4.			
Total			

Since the FAA Fiscal Year is from October through September, efforts should begin immediately to identify the development that will be eligible for federal or other funding during this period. The City of Cottonwood should have applications submitted early for the maximum funding possible in case additional funds become available.

91MP21-6C-972383



BUILDINGS/FACILITIES

EXISTING	ULTIMATE	DESCRIPTION
--	(1)	TERMINAL BUILDING/PARKING
(2)	--	COTTONWOOD AIR SERVICE HANGAR (FBO)
(3)	--	VACANT
(4)	--	COTTONWOOD AIRPARK INC.
(5)	--	COTTONWOOD AIRPARK INC.
(6)	--	ADVENTURE'S OUTPOST
(7)	--	WASTE MANAGEMENT OF VERDE VALLEY
(8)	--	FUEL STORAGE
(9)	--	POWER VAULT
--	(10)	T-HANGAR
--	(11)	T-SHADE

LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		AVIGATION EASEMENT (if applicable)
		BUILDING CONSTRUCTION
	BRL	BUILDING RESTRICTION LINE (BRL)
		DRAINAGE
		FACILITY CONSTRUCTION
		FENCING
VAS-4	PAPI-4	NAVIGATIONAL AID INSTALLATION
		RUNWAY END IDENTIFICATION LIGHTS (REIL)
		RUNWAY THRESHOLD LIGHTS
		SECTION CORNER
		SEGMENTED CIRCLE/WIND INDICATOR
1050		TOPOGRAPHIC CONTOURS
		WIND INDICATOR (Lighted)

LEGEND:

(1) Development Item

Cottonwood ARIZONA

Exhibit 6C
STAGE I (FY 1993-FY 1997)
AIRPORT DEVELOPMENT PROGRAM

The table provided below has been designed to note the funds available so that they can be kept in mind while analyzing the development factors outlined for this period on the next few pages. The table also provides a reminder of other potential sources that might be used in critical situations.

Airport Funds Balance $_____
Bonds $_____
Contributions/Other $_____

TOTAL: $_____

As a reminder, airport development should be keyed to demand (actual activity) rather than to a specific time frame (forecast activity). The spaces provided below allow actual activity data to be recorded for comparison with the forecast levels. This should be the first step in the process of initiating the recommended development program for this period. Significant difference between forecast and actual activity may justify acceleration or deceleration of the airport development schedule.

Item	FY1998-1999		FY1999-2000		FY2000-2001		FY2001-2002		FY2002-2003	
	FCST	ACT	FCST	ACT	FCST	ACT	FCST	ACT	FCST	ACT
Based Aircraft	34		35		36		36		37	
Operations	28,030		28,810		29,710		30,610		31,510	
Fuel Sales (Gallons)	39,242		46,096		47,536		48,976		50,416	
Enplanements	4,760		4,900		5,060		5,220		5,380	

Based on the activity comparison above, should the recommended development schedule be maintained? Have new problems, needs or development potentials occurred which may impact the development program? What adjustments in the development schedule are required to effectively deal with these factors?

In order to maintain the continuity of a staged development plan and to meet forecast activity demand, the following development items are recommended. Each item is numbered so that it can be cross-referenced on the following exhibit. The costs for every development consider 25 percent of engineering, contingency, and administration.

STAGE II (Continued)
FY1998-2002 Development Funding

Development Item	Local	Federal	State	Private	Total
Stage II - FY1998-2002					
1. Acquire Avigation Easements, ± 1.2	$2,459	$50,083	$2,458	$0	$55,000
2. Relocate Segmented Circle	268	5,464	268	0	6,000
3. Terminal building expansion	11,000	0	99,000	0	110,000
4. Install NDB	0	60,000	0	0	60,000
5. Paint Non-Precision markings	626	12,748	626	0	14,000
6. Construct 10 T-shades	0	0	0	140,000	140,000
7. Extend Apron area ± 23,000 SY	12,963	264,074	12,963	0	290,000
8. Pavement preservation	10,000	0	90,000	0	100,000
TOTAL STAGE II FY1998-2002	**$37,316**	**$392,369**	**$205,315**	**$140,000**	**$775,000**

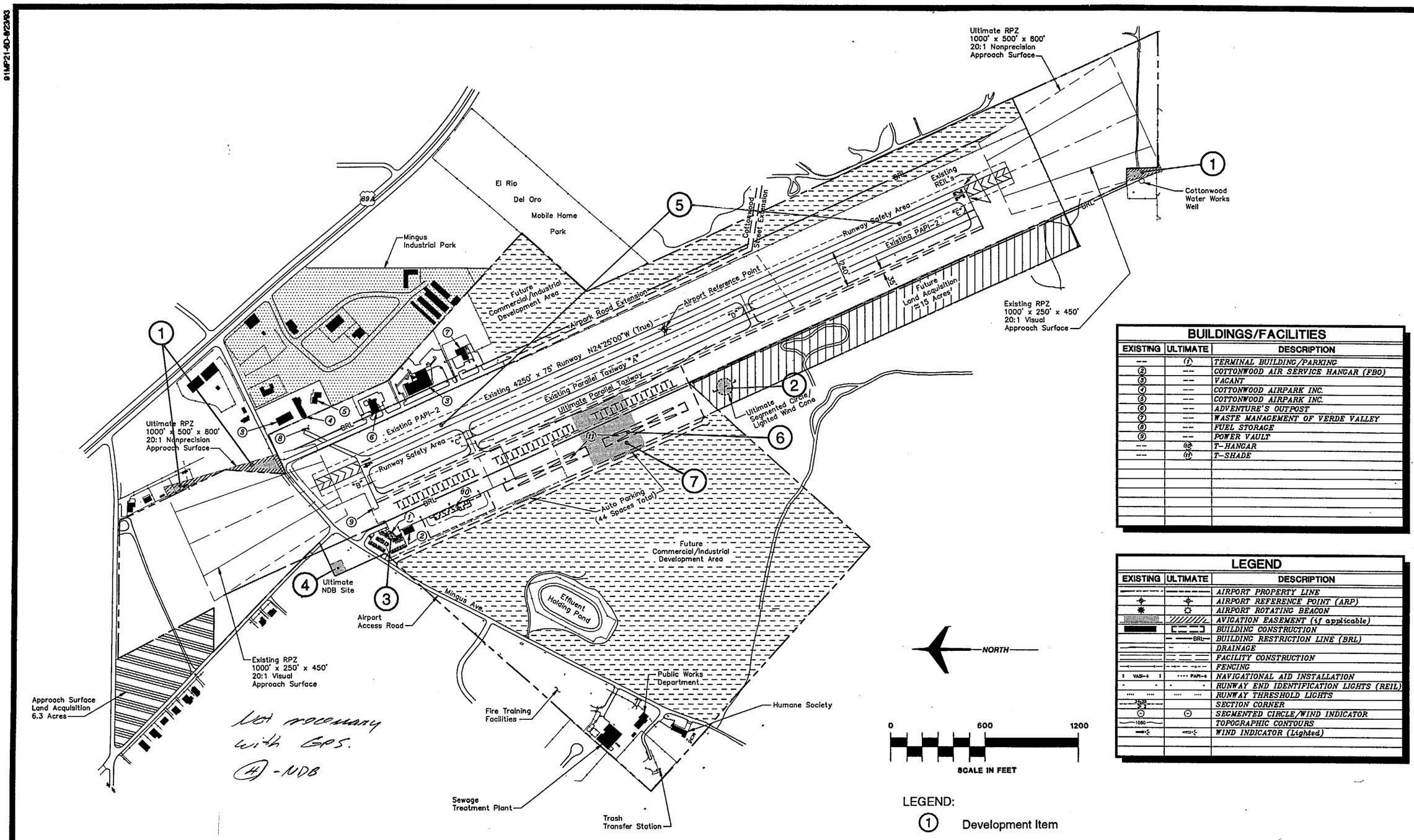
Inflation Adjustment: _____% X $775,000 = $_____

Plus or Minus Other Proposed Development:

1.			
2.			
3.			
4.			
Total			

Since the FAA Fiscal Year is from October through September, efforts should begin immediately to identify the development that will be eligible for federal or other funding during this period. The City of Cottonwood should have applications submitted early for the maximum funding possible in case additional funds become available.

91MP21-6D-8/23/93



BUILDINGS/FACILITIES

EXISTING	ULTIMATE	DESCRIPTION
---	(1)	TERMINAL BUILDING/PARKING
(2)	---	COTTONWOOD AIR SERVICE HANGAR (FBO)
(3)	---	VACANT
(4)	---	COTTONWOOD AIRPARK INC.
(5)	---	COTTONWOOD AIRPARK INC.
(6)	---	ADVENTURE'S OUTPOST
(7)	---	WASTE MANAGEMENT OF VERDE VALLEY
(8)	---	FUEL STORAGE
(9)	---	POWER VAULT
---	(10)	T-HANGAR
---	(11)	T-SHADE

LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		AVIGATION EASEMENT (if applicable)
		BUILDING CONSTRUCTION
	BRL	BUILDING RESTRICTION LINE (BRL)
		DRAINAGE
		FACILITY CONSTRUCTION
		FENCING
VASI-4	PAPI-4	NAVIGATIONAL AID INSTALLATION
		RUNWAY END IDENTIFICATION LIGHTS (REIL)
		RUNWAY THRESHOLD LIGHTS
		SECTION CORNER
		SEGMENTED CIRCLE/WIND INDICATOR
1080		TOPOGRAPHIC CONTOURS
		WIND INDICATOR (Lighted)

LEGEND:

(1) Development Item

Cottonwood ARIZONA

Exhibit 6D
STAGE II (FY 1998-FY 2002)
AIRPORT DEVELOPMENT PROGRAM

STAGE III
FY2003-2015 Airport Development Program

The table provided below has been designed to note the funds available so that they can be kept in mind while analyzing the development factors outlined for this period on the next few pages. The table also provides a reminder of other potential sources that might be used in critical situations.

Airport Funds Balance $_____
Bonds $_____
Contributions/Other $_____
TOTAL: $_____

As a reminder, airport development should be keyed to demand (**actual** activity) rather than to a specific time frame (**forecast** activity). The spaces provided below allow actual activity data to be recorded for comparison with the forecast levels. This should be the first step in the process of initiating the recommended development program for this period. Significant difference between forecast and actual activity may justify acceleration or deceleration of the airport development schedule.

Item	FY2003-2004		FY2004-2005		FY2005-2006		FY2006-2007	
	FCST	ACT	FCST	ACT	FCST	ACT	FCST	ACT
Based Aircraft	37		38		39		40	
Operations	32,410		33,310		34,350		35,390	
Fuel Sales (Gallons)	51,856		59,958		61,830		63,702	
Enplanements	5,540		5,700		5,860		6,020	

Item	FY2007-2008		FY2008-2009		FY2009-2010		FY2010-2011	
	FCST	ACT	FCST	ACT	FCST	ACT	FCST	ACT
Based Aircraft	40		41		42		43	
Operations	36,430		37,470		38,510		39,570	
Fuel Sales (Gallons)	65,574		67,446		77,020		79,140	
Enplanements	6,180		6,340		6,500		6,700	

Item	FY2011-2012		FY2012-2013		FY2013-2014		FY2014-2015	
	FCST	ACT	FCST	ACT	FCST	ACT	FCST	ACT
Based Aircraft	44		44		45		46	
Operations	40,630		41,690		42,750		43,810	
Fuel Sales (Gallons)	81,260		83,380		85,500		96,382	
Enplanements	6,900		7,100		7,300		7,500	

Based on the activity comparison above, should the recommended development schedule be maintained? Have new problems, needs or development potentials occurred which may impact the development program? What adjustments in the development schedule are required to effectively deal with these factors?

In order to maintain the continuity of a staged development plan and to meet forecast activity demand, the following development items are recommended. Each item is numbered so that it can be cross-referenced on the following exhibit. The costs for every development consider 25 percent of engineering, contingency, and administration.

STAGE III (Continued)
FY2003-2015 Airport Development Program

Development Item	Local	Federal	State	Private	Total
1. Relocate Taxiway A	$32,408	$660,185	$32,407	$0	$725,000
2. Install MITL	8,314	169,372	8,314	0	186,000
3. Construct conventional hangar	0	0	0	85,000	85,000
4. Construct (10) T-hangars	0	0	0	200,000	200,000
5. Extend apron area ± 25,000 SY	13,410	273,180	13,410	0	300,000
6. Pavement preservation	10,000	0	90,000	0	100,000
TOTAL STAGE FY2003-2015	$64,132	$1,102,737	$144,131	$285,000	$1,596,000
TOTAL AIRPORT DEVELOPMENT PROGRAM FY1993-2015	**$248,445**	**$2,629,714**	**$596,841**	**$775,000**	**$4,250,000**

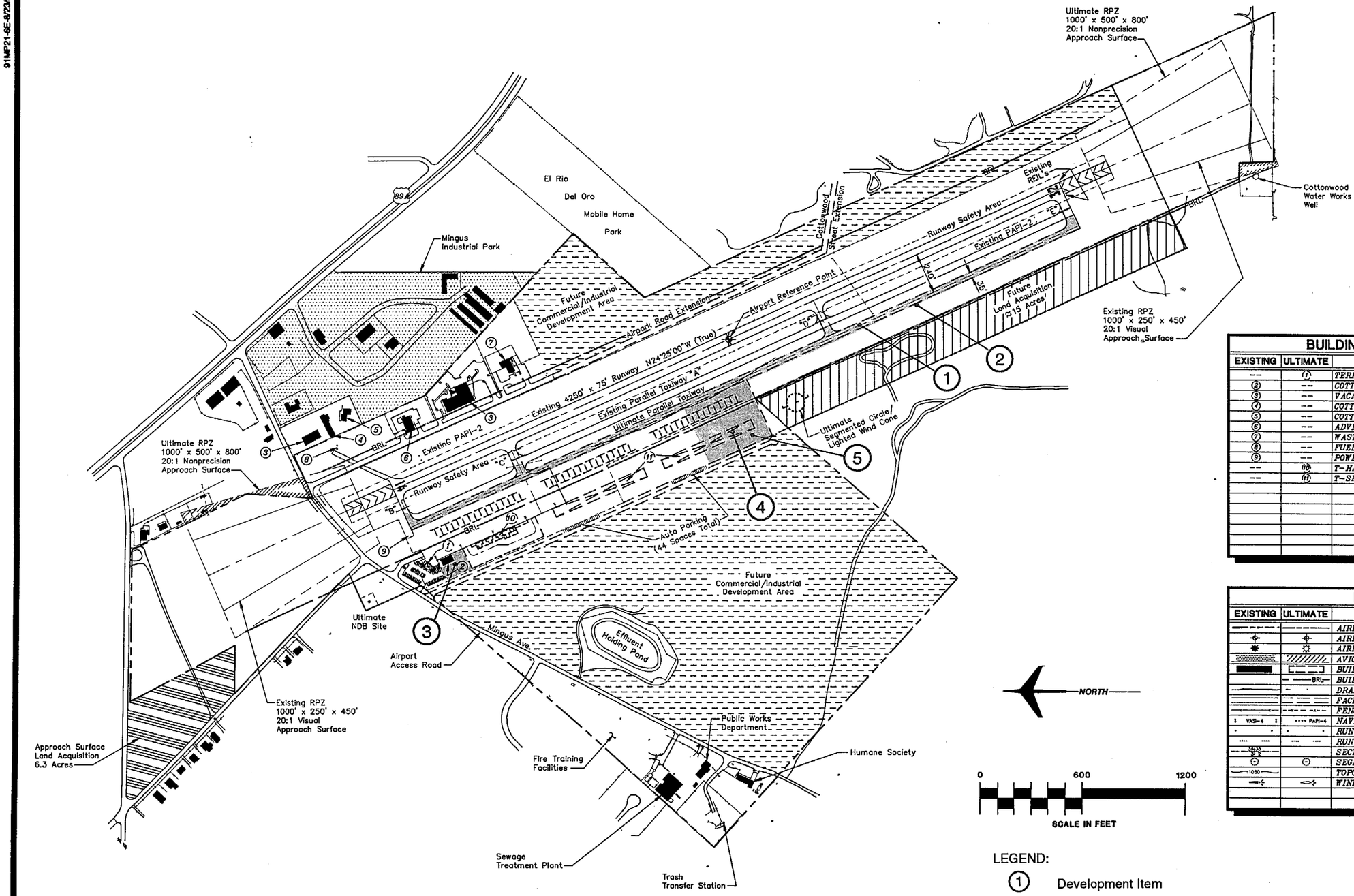
Inflation Adjustment: _____% X $1,596,000 = $_____

Plus or Minus Other Proposed Development:

1.			
2.			
3.			
4.			
Total			

Since the FAA Fiscal Year is from October through September, efforts should begin immediately to identify the development that will be eligible for federal or other funding during this period. The City of Cottonwood should have applications submitted early for the maximum funding possible in case additional funds become available.

91MP21-6E-8/23/03



BUILDINGS/FACILITIES

EXISTING	ULTIMATE	DESCRIPTION
---	(1)	TERMINAL BUILDING/PARKING
(2)	---	COTTONWOOD AIR SERVICE HANGAR (FBO)
(3)	---	VACANT
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(7)	---	WASTE MANAGEMENT OF VERDE VALLEY
(8)	---	FUEL STORAGE
(9)	---	POWER VAULT
---	(10)	T-HANGAR
---	(11)	T-SHADE

LEGEND

EXISTING	ULTIMATE	DESCRIPTION
		AIRPORT PROPERTY LINE
		AIRPORT REFERENCE POINT (ARP)
		AIRPORT ROTATING BEACON
		AVIGATION EASEMENT (if applicable)
		BUILDING CONSTRUCTION
	BRL	BUILDING RESTRICTION LINE (BRL)
		DRAINAGE
		FACILITY CONSTRUCTION
		FENCING
VASI-4	PAPI-4	NAVIGATIONAL AID INSTALLATION
		RUNWAY END IDENTIFICATION LIGHTS (REIL)
		RUNWAY THRESHOLD LIGHTS
		SECTION CORNER
		SEGMENTED CIRCLE/WIND INDICATOR
1080		TOPOGRAPHIC CONTOURS
		WIND INDICATOR (Lighted)

Cottonwood ARIZONA

Exhibit 6E
STAGE III (FY 2003-FY 2015)
AIRPORT DEVELOPMENT PROGRAM